

cells. We further studied Lrig1 pattern in CD44KO mice, where the hyalurosoma is defective, and observed an atrophic Lrig1 reservoir and a defective stem cell migration from hair germ in newborns. Activating the hyalurosoma with defined size HA fragments (HAFI) or inhibiting it with clobetasol propionate (CP) also had antagonist effects on the Lrig1 reservoir in mice. Finally, we confirmed functionally in vitro this Lrig1 role on the environment of human keratinocytes as inhibiting Lrig1 expression with siRNA induced filopodia and HA secretion or in other words the hyalurosoma, while overexpressing a GFP-tagged Lrig1 protein rather inhibited the hyalurosoma. Our results suggest that the stem cell marker Lrig1 modulates its ECM environment via the hyalurosoma, while inversely ECM or the cell niche also regulates stem cells.

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# Urgent consultations in the dermatology department at the university hospital of Basel, Switzerland – Characterisation of patients and setting – An analysis of 12 months with 2222 patient data

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Background: Urgent consultations for skin disorders are commonly seen by general practitioners (GP), dermatologist, outpatient services in hospitals, and in Emergency Departments. The exact frequency of the various dermatological conditions and characteristics of these patients have been limited studied and most published data are heterogeneous.

Objective: The aim of this study was to analyse peculiar characteristics of patients receiving an urgent consultation in a Dermatology Department of an University Hospital.

Methods: We prospectively recorded data of all patients having an urgent consultation on weekdays during 12-month in 2007 at the Department of Dermatology in the University Hospital of Basel (DDUHB).

Results: In 2007 the DDUHB registered 10'998 outpatients, 2222 of them (20,2%) were seen in an urgent consultation. Most frequent diagnoses were eczema (all types) 24.8%, dermatomycosis 5.1% and dermatitis n.o.s 4.8%. Most frequent localisations were face (19.3%), trunk (15.1%) and generalized (13%). Additional diagnostic procedures has been used in 30% of cases: smear test, direct microscopy analysis, skin biopsy, and blood laboratory analyses (each 7-10% of cases). Most frequent topical treatments were steroids (44.6%), emollients (26.2%), and topical antibiotics (23.2%). Most frequent systemic treatment were antihistamines (11.1%), antibiotics (6.2%), and virostatics (3.9%). Most patients (71.3%) showed up spontaneously without referral. 52.6% of patients received a follow up appointment, 2.2% had been hospitalized. 68.6% of patients asked a consultation for a disease lasting less than 4 weeks, 52.5% less than 2 weeks and 6.9% came the same day as the skin disease appeared. Extent of urgent consultation was mostly 30 minutes (52.3%), or 15 minutes (40.1%).

Conclusions: This study shows several characteristics of patients receiving an urgent dermatological consultation. It underlines the need for collaboration between internal medical doctors, GP and dermatologists. It is suggested the value of a so called "open line" for urgent consultations where emergency is defined by the patients, if the proposed appointment is not convenient.

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# High rate of variations within the C-terminus of keratin 10 in the general population

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Mutations within the keratin 10 (KRT10) gene lead to different severe diseases of human skin, the epidermolytic ichthyosis (EI) and the ichthyosis with confetti (IWC) among others. Both diseases are characterized by congenital erythroderma and severe erosions of the skin. The EI is often caused by heterozygous missense mutations mostly located within the rod-domain of the KRT10 protein, whereas the IWC is caused by frameshift mutations leading to an arginine-rich C-terminus of the aberrant protein.

We examined the 3'-region of the KRT10 gene coding for the tail region of the KRT10 in 17 individuals without known skin disease from the general population by direct sequencing and identified several large in-frame insertions and deletions, which have not been reported before. All variants were located within the exon 7 close to that region which is mutated in IWC, and shortened or extended the sequence up to 90bp.

Whereas small in-frame deletions within the rod domain of KRT10 lead to a severe phenotype, large reductions or extensions within the tail of the protein seem not to influence the function of the KRT10 protein. The tail of K10 contains many repetitive loops, built up from numerous glycine replications, and is presumably involved in the formation of keratin filaments. However, adding or deleting some loops seems not to influence the function of the protein and therefore result in an unremarkable phenotype.

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# C3d, IgG, IgM, IgA, IgE immunohistochemistry on formalin-fixed tissue in the diagnosis of bullous pemphigoid of the skin

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Background: Direct immunofluorescence (DIF) testing is currently the gold standard analysis in the diagnosis of most autoimmune bullous dermatoses.